

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A portable satellite uplink for use in connection with a webcasting system for capturing live media content at a first location and webcasting the live media content to a second location, said webcasting system including a satellite communication link having a transmission propagation delay, a communication satellite, an encoder encoding the live media content into a first digital webcast format at the first location, said first digital webcast format being sensitive to the transmission propagation delay and requiring at least one transmission acknowledgement signal, the portable satellite uplink comprising:

a control processor receiving the live media content in the first digital webcast format and providing the at least one transmission acknowledgement signal to the encoder, said control processor converting the live media content to a second digital webcast format having a characteristic such that the second digital webcast format is insensitive to the transmission propagation delay;

a satellite communication signal converter receiving the live media content in the second digital webcast format, said satellite communications signal converter converting the live media content received in the second

digital webcast format to a satellite transmission signal compatible with the satellite communication link; and

a satellite uplink transceiver receiving the satellite transmission signal and transmitting the satellite transmission signal to the satellite over the satellite communication link wherein the satellite downlinks the satellite transmission signal for reception on the earth at the second location, said satellite uplink transceiver comprising:

an antenna for directing the satellite transmission signal;

at least one motor for positioning the antenna;

an antenna controller responsive to a global positioning satellite system and an electronic compass for estimating a direction to a satellite and providing a motor command corresponding to the estimated direction, said motor being responsive to the motor command for positioning the antenna to direct the satellite transmission signal in the estimated direction, said antenna controller further being configured for, after estimating the direction, measuring a signal strength of the communications link established with the satellite and providing the motor command to position the antenna for optimizing reception of the transmission signal at the satellite; and

wherein the portable satellite uplink is responsive to a teleport for setting a transmitter center frequency and data rate, said center frequency and data rate defining a bandwidth for transmissions to the satellite to manage transmissions from a plurality of portable satellite uplinks to the satellite and wherein the portable satellite uplink adjusts the power with which the satellite

transmission signal is transmitted in response to input from the teleport.

2. (previously presented) The portable satellite uplink of claim 1 wherein the first digital webcast format utilizes a TCP protocol having a first propagation delay tolerance less than the propagation delay of the satellite communication link and wherein the satellite uplink acts as a TCP endpoint such that the second digital webcast format is insensitive to the propagation delay.

3. (previously presented) The portable satellite uplink of claim 2 wherein the second digital webcast format comprises a modified TCP protocol having a second propagation delay tolerance in excess of the propagation delay.

4. (currently amended) A webcasting system for webcasting live media content over a satellite communication link having a transmission propagation delay and including a communication satellite, said webcasting system comprising:

an encoder at a first location encoding said live media content into a first digital webcast signal having a first digital webcast format that is sensitive to the transmission propagation delay, said encoder requiring receipt of at least one transmission acknowledgment signal; and

a portable uplink router at the first location, said portable uplink router being responsive to a teleport for setting a transmitter center frequency and data rate, said

center frequency and data rate defining a bandwidth for transmissions to a particular satellite to manage transmissions from a plurality of portable satellite uplinks to the satellite, said portable uplink router comprising:

a control processor receiving the first digital webcast signal and providing the at least one transmission acknowledgment signal to the encoder, said control processor converting the first digital webcast signal to a second digital webcast signal being insensitive to the transmission propagation delay;

a satellite communications signal converter receiving the second digital webcast signal, said satellite communications signal converter converting the second digital webcast signal into a satellite transmission signal; and

a satellite uplink transceiver receiving the satellite transmission signal and transmitting the satellite transmission signal to the satellite such that the satellite downlinks the satellite transmission signal for reception on the earth at a second location different from the first location;

and wherein the webcasting system adjusts the power with which the satellite transmission signal is transmitted in response to input from the teleports.

5. (original) The webcasting system of claim 4 further comprising:

an earth station in electronic communication with the satellite, said earth station receiving the satellite transmission signal and converting the satellite

transmission signal in to a third digital webcast signal having the first digital webcast format; and

a router receiving the third digital webcast signal and routing the third digital webcast signal to a wide area network.

6. (currently amended) A method of webcasting live media content over a satellite communication link having a transmission propagation delay and including a communication satellite, said method comprising:

encoding said live media content at a first location into a first digital webcast signal having a first digital webcast format that is sensitive to the transmission propagation delay, said first digital webcast format requiring receipt of at least one transmission acknowledgment signal;

uplinking the encoded media content from the first location across the satellite communication link by an uplink method comprising:

receiving the first digital webcast signal;
providing the at least one transmission acknowledgment signal required by the first digital webcast format;

converting the first digital webcast signal to a second digital webcast signal being insensitive to the transmission propagation delay of the satellite communication link;

converting the second digital webcast signal into a satellite transmission signal;

receiving positional data from a global positioning satellite system and an electronic compass;

estimating a direction of the communication satellite based on the received positional data;

providing a motor command corresponding to the estimated direction of the communication satellite;

receiving the motor command at an antenna positioning motor, wherein the antenna positioning motor is responsive to the motor command for pointing an antenna such that the antenna pointed by the antenna pointing motor directs the satellite transmission signal in the estimated direction of the communication satellite;

establishing the satellite communications link;

measuring a signal strength of the satellite communications link;

optimizing reception of the satellite transmission signal at the satellite; and

transmitting the satellite transmission signal from the first location to the communication satellite;

downlinking the satellite transmission signal for reception on the earth at a second location different from the first location; ~~and~~

setting, in response to input from a teleport, a transmitter center frequency and data rate, said center frequency and data rate comprising a bandwidth for transmissions to a satellite to manage transmissions from a plurality of portable satellite uplinks to the satellite; and

adjusting the power with which the satellite transmission signal is transmitted in response to input from the teleport.

7. (original) One or more computer-readable media having computer-executable instructions for performing the method of claim 6.

8. (canceled)

9. (previously presented) The portable satellite uplink of claim 1 wherein the antenna controller provides the motor command such that the antenna sweeps a range of directions and the antenna controller identifies the directions of a plurality of satellites and estimates the direction to a satellite to be the direction of the satellite having the best measured signal strength.

10. (canceled)

11. (canceled)

12. (previously presented) The webcasting system of claim 4 wherein the webcasting system further comprises:
an antenna for directing the satellite transmission signal;
at least one motor for positioning the antenna; and
an antenna controller responsive to a global positioning satellite system and an electronic compass for estimating a direction to a satellite and providing a motor command corresponding to the estimated direction, said

motor being responsive to the motor command for positioning the antenna to direct the satellite transmission signal in the estimated direction, said antenna controller further being configured for, after estimating the direction, measuring a signal strength of the communications link established with the satellite and providing the motor command to position the antenna for optimizing reception of the transmission signal at the satellite.

13. (previously presented) The webcasting system of claim 12 wherein the antenna controller provides the motor command to cause the antenna to sweep a range of directions, identifies the directions of a plurality of satellites, and estimates the direction to a satellite to be the direction of the satellite having the best measured signal strength.

14. (canceled)

15. (canceled)

16. (canceled)

17. (canceled)

18. (canceled)

19. (canceled)

20. (previously presented) The method of claim 6 further comprising:

receiving the satellite transmission signal on earth;
converting the satellite transmission signal to the
first digital webcast format;

providing a third digital webcast signal to at least
one user, wherein the third digital webcast signal has the
first digital webcast format;

decoding the third digital webcast signal; and

rendering the live media content to the user from the
decoded third digital webcast signal.